Synthetic Biology

Project Title	PI Name	Performer	Type
Rewiring a Microbial Chassis to Optimize Electrosynthesis	Lovley, Derek	U. Mass Amherst	Basic Research
Electron Transfer in Environmentally Robust Marine Microorganisms for the Biotic/Abiotic Interface	Glaven, Sarah	NRL DC	Basic Research
Synthetic Electric Microbial Biosensors	Franks, Ashley	La Trobe University, Australia	Basic Research, co-Supported by ONR Global and Asian Office of Aerospace Research and Development
Direct Electron-Mediated Control of Hybrid Multi-cellular Robots	Maharbiz, Michel/Ajo-Franklin, Caroline	U.CA at Berkeley/DOE LBNL	Basic Research
Microbes and Magnets: Synthetic Organisms Capable of Magentically Guided Electricity Generation	Komeili, Arash	U.CA. at Berkeley	Basic Research
Utilizing Synthetic Biology to Create Programmable Micro-Bio-Robots	Collins, James	Boston U	Basic Research, Multi-Disciplinary University Research Initiative (MURI)
Towards Morse Code for Biology: Engineering RNA Circuitry for Decoding Temporal Information Pulses into Programmable	Lucks, Julius	Cornell	Basic Research, Young Investigator Program
Engineering Geobacter to be a useful bioelectrical communicator	Bond, Daniel	University of Minnesota	Basic Research

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Characterization of the NO/H-NOX pathway as a target for new antibiotic development	Boon, Elizabeth	State University of New York @ Stony Brook	Basic Research. Presidential Early Career Award for Scientists and
Establishing a Fungal Platform for Alkane Biosynthesis	Alper, Hal	University of Texas	Basic Research, Young Investigator Program
Engineered Ribosomes for the Production of Sequence Defined Polymers	Jewett, Michael	Northwestern U	Basic Research
Powerful Combinatorial Sensors to Program Microbes	Voigt, Christopher	MIT	Basic Research
Shewanella Synthetic Biology for Electrophysiology	Gralnick, Jeff	University of Minnesota	Basic Research
Maximizing Photonic and Optoelectronic Properties in Genetically-Enhanced Biosilica for the Development of Next Generation Sensors	Roesijadi, Guri /Rorrer, Greg	DOE PNNLOregon State University	Basic Research
MURI: Next-generation Genetic Devices: Model-guided Discovery and Optimization of Cell-based Sensors (overview)	Voigt, Christopher	MIT	Basic Research, Multi-Disciplinary University Research Initiative (MURI)
Painting metabolic landscapes using 21st century bacterial genetics and synthetic biology	Gralnick, Jeff	U. Minnesota	Basic Research
Quantitative Analysis of Synthetic Gene Parts for Plants.	Medford, June	Colorado State University	Basic Research
Ultra-High-Throughput Design and Optimization of Sense-and-Actuate Circuits in Marine and Soil Bacteria	Lu, Tim	MIT	Applied Research